GENERAL PATHOLOGY—Second Edition—Sir Howard Florey, Professor of Pathology. W. B. Saunders Co., Philadelphia and London, 1958, 932 pages, \$16.00.

This book consists of material presented in a series of lectures in a course in general pathology and bacteriology to students who have read the Honour School of Physiology at Oxford, in which a year of intensive study of Physiology and Biochemistry has been successfully completed. It is written by fifteen authors who deal with subjects in which they are especially interested. The reader will find this volume entirely different from most textbooks in pathology used in this country today. There is very little gross or microscopic description of morphologic changes. There is instead a discussion of the fundamental changes that take place in the body in response to injury, and a presentation of the latest views about the nature and causes of such changes. Much of this represents an excellent review of appropriate experimental pathology and modern biochemistry, including recent studies on the chemistry of the nucleus and cytoplasm and the enzymes thereof.

Several well written chapters review carefully recent knowledge of changes in acute and chronic inflammation as well as edema and shock. Several chapters deal with the pathogenicity and virulence of micro-organisms, including one chapter on viruses. Eight chapters discuss antigens and antibodies and the general subjects of immunity and hypersensitivity. The last two chapters deal with the influence of drugs on inflammatory processes and the mode of action of antibacterial substances in vitro.

The average practitioner of medicine will have great difficulty with parts of this book, especially the portions involving recent biochemistry, but a student in his second or third year of medical school should profit greatly by this almost complete departure from morphologic pathology, which must be learned from other sources.

TEXTBOOK OF PHYSIOLOGY AND BIOCHEMISTRY—Fourth Edition—George H. Bell, B.Sc., M.D. (Glasg.), F.R.F.P.S.G., F.R.S.E., Professor of Physiology in the University of St. Andrews at Queen's College, Dundee; J. Norman Davidson, M.D., D.Sc. (Edin.), F.R.F.P.S.G., F.R.I.C., F.R.S.E., Gardiner Professor of Biochemistry in the University of Glasgow; formerly Professor of Biochemistry in the University of London at St. Thomas's Hospital Medical School; and Harold Scarborough, M.B., Ph.D. (Edin.), F.R.C.P.E., M.R.C.P., Professor of Medicine in the Weish National School of Medicine of the University of Wales and Director of the Medical Unit in the Royal Infirmary, Cardiff; formerly Reader in Medicine in the University of Birmingham. With a foreword by Robert C. Garry, M.B., D.Sc. (Glasg.), F.R.F.P.S.G., F.R.S.E., Regius Professor of Physiology in the University of Glasgow. The Williams and Wilkins Company, Baltimore, 1959. 1065 pages, \$12.50.

The reviewer has had the privilege of these pages for describing the first two editions of this textbook, the popularity of which is indicated by the fact that it is now in its fourth edition and that it has been translated into an Italian edition. Whereas the third edition had been 80 pages larger than the second, the fourth edition is 17 pages shorter than the third. Chapter headings and sequence are essentially the same. In addition to adding selected material, the book is much improved by changing the style of designating chemical formulas, by addition of many black and white and color illustrations and by simplification of tables of data. Much of the biochemical information, treated statically in the earlier editions is now presented in the dynamic terms of physiological chemistry. To incorporate the essentials of both biochemistry and physiology in a book of 1023 pages, exclusive of index, is a real achievement. In his foreword to the first edition, which has been reprinted without change in succeeding editions, Professor R. C. Garry writes: "For those who mean to specialize in physiology, in biochemistry,

in pharmacy or in pharmacology this book can be no more than an introduction. But it is an introduction which is essential if narrowness in thought and frustration in achievement are to be avoided." The same can be said of any textbook appropriate for professional students in their earlier years of study. Detailed information must come from reading reviews, monographs and the original scientific reports upon which all books on science are based.

This fourth edition is composed of 55 chapters and a final three pages of units of measure and age-weight-height relations of men and women. The opening chapter is a general introduction which could well be omitted, for it lacks sufficient information to orient the beginning reader, tells nothing the experienced reader does not know and serves no purpose not served by the preface, namely an apologia for the book. The subsequent chapters are well arranged, both as to order and content. Basic chemical structure of protoplasm comprises the material of five of the first six chapters. The reviewer believes that Chapter 9 on "Water and Minerals" should precede Chapter 7 on "Enzymes" and that Chapter 10 on "The Vitamins" should stand between Chapter 7 and Chapter 8, "Biological Oxidations and Reductions." Beginning with Chapter 13 on "Temperature Regulation" the authors relate the physical and mechanical aspects of physiology to chemical changes and chemical dynamics in a manner few other writers have achieved. Where anatomy and histology clarify the presentation, such information is included, with excellent illustrations. Although the physical and chemical, the static and dynamic, cannot be separated in practice and should ideally be taught simultaneously, one wonders where may be found those supermen who can know both aspects so well as to teach them with the conviction of familiarity. The limitations of human experience and ability and the practical necessities of teaching and research laboratories still justify the separation of biochemistry and physiology, with considerable excusable overlapping, in the teaching curriculum.

CLINTON H. THIENES, M.D., Ph.D.

GROVES' SYNOPSIS OF SURGERY—Fifteenth Edition—Edited by Sir Cecil Wakeley, Bt., K.B.E., C.B., LL.D., M.Ch., D.Sc., F.R.C.S., F.A.C.S., F.R.A.C.S., Past President of the Royal College of Surgeons of England; Fellow of King's College, London. The Williams and Wilkins Company, Baltimore, 1958. 650 pages, illustrated, \$8.50.

This is the fifteenth edition of a standard synopsis of surgery prepared by Sir Cecil Wakeley. The number of editions alone attest to the fact that this must be an excellent book, summarizing principles of general surgery.

The book is written in small print, is simply illustrated with line drawings and is in outline form. Nevertheless, there is sufficient discussion about each topic that one can get a very good general idea of the surgical problem under discussion. It is the type of book which a student would be interested in studying. A general practitioner could use it for reviewing major surgical problems which might require more extensive treatment, and it would serve as an excellent review book for board examinations and refresher courses in general surgery.

Nothing on technique is given but an understanding of the nature of the surgical treatment involved is clearly expressed. Urological, plastic, general, vascular, orthopedic surgery are equally covered in this outline fashion.

This book is an effort to encompass the bulk of surgical knowledge for students. It compresses and summarizes the essentials of an ever-advancing science in a concise and methodical manner.

It is recommended particularly for students and general practitioners.

VICTOR RICHARDS, M.D.